

S/N 09/099,009

Patent

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- a) about 10% by weight to about 50% by weight of at least one tackifying resin having a glass transition temperature of at least 65°C [or higher, said tackifying resin derived at least in part, from dicyclopentadiene];
- b) about 20% to about 60% by weight of at least one thermoplastic polymer selected from the group consisting of copolymers and terpolymers of ethylene; amorphous polyalphaolefins, homogeneous ethylene/ α -olefin interpolymers, [rubbery block copolymers,] and mixtures thereof; and
- c) 0% by weight to about 40% by weight of at least one wax;
- wherein said total tackifying resin concentration [does not exceed said] is less than said total polymer concentration [by percent weight of said adhesive composition].
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22. (amended) A hot melt adhesive composition comprising:

- a) about 10% by weight to about 50% by weight of at least one hydrocarbon tackifying resin derived, at least in part, from dicyclopentadiene and having a Tg of greater than about 65°C; and
- b) from about 10% to about 80% by weight of at least one polymer selected from the group consisting of amorphous polyalphaolefins, homogeneous ethylene/ α -olefin interpolymers, [rubbery block copolymers,] and mixtures thereof.
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30. (new) A hot melt adhesive composition comprising:

- a) about 10% by weight to about 50% by weight of at least one substantially aliphatic tackifying resin having a softening point of greater than 140°C;
- b) about 20% to about 60% by weight of at least one thermoplastic polymer; and
- c) 0% by weight to about 40% by weight of at least one wax;
- wherein said total tackifying resin concentration is less than said total polymer concentration.
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Claims 1-29 are rejected under 35 U.S.C. 102 (b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Alper. The Examiner directed the Applicants attention to column 4, lines 5+ as well as Example 2.

Alper et al. is directed to hot melt adhesives for the construction of disposable soft goods. The adhesive compositions include a SIS copolymer containing at least about 25% styrene, a compatible tackifying resin, a plasticizing oil and an effective amount of a stabilizer. The adhesive compositions described therein are pressure sensitive in nature due to the inclusion of a plasticizing oil. Example 2 employs 35 parts of an SIS block copolymer (Sol T 193B), 40 parts of hydrogenated dicyclopentadiene resin (Escorez 5340), 10 parts of aromatic reinforcing resin (Endex 155), 15 parts of naphthenic/paraffinic mineral oil, and antioxidant.

The present invention differs from Alper et al. in several respects. In preferred embodiments, the adhesive composition of the present invention differs with regard to the type of polymer employed. In the present invention, the adhesive composition preferably comprises copolymers and terpolymers of ethylene, amorphous polyalphaolefins, homogeneous ethylene/ α -olefin interpolymers, or mixtures thereof in addition to a tackifying resin having a high glass transition temperature. Claims 20 and 22 have been amended to reflect this point. Alper et al. fails to teach adhesive compositions comprising polymers other than block copolymers.

In another aspect, the present invention differs with regard to the selection of tackifying resin employed. Claim 1 has been amended to recite that the adhesive composition employs a substantially aliphatic tackifying resin having a Tg of greater than 80°C. As noted on p. 8, lines 13-14 of the specification of the present invention, Escorez 5340, the tackifying resin employed in Example 2 of Alper et al, has a Tg of 76°C. Accordingly, Alper does not teach or suggest an adhesive composition comprising a substantially aliphatic tackifying resin having a Tg of greater than 80°C.

In another aspect, the present invention differs from Alper with regard to the softening point of the resin. New Claim 30 and amended Claim 4 recite that